ABSTRACT OF THE DISCLOSURE

A garbage collector that operates in multiple threads divides a generation of a garbage-collected heap into heap sections, with which it associates respective remembered sets of locations where references to objects in those heap sections have been found. When such a heap section comes up for collection, each of a plurality of parallel garbage-collector threads that is processing its remembered set maintains a separate "popularity"-indicating count map, which includes an entry for each of a set of segments into which the collector has divided that heap section. The thread increments an entry in its count map each time it finds a reference to an object in the associated segment. If an object is located in a segment for which the associated count-map entry has exceeded a threshold, the thread evacuates the object in a manner different from that in which it evacuates objects not thus been found to be popular.